

Computer Based Matching System for Buyers and SellersField of the Invention

5 This invention relates to a computer based system which enables buyers and sellers to be efficiently matched, and in particular to an Internet based system which enables buyers and sellers to be efficiently matched. The invention is exemplified by a new business model and system for foreign exchange transactions.

Description of the Prior Art

10 The Internet offers the promise of enabling buyers and sellers of goods and services to communicate directly with one another, eliminating the need for some of the intermediaries and the associated economic inefficiencies present in conventional selling. Hence, for example, it is in 1998 possible to transact many kinds of business using the Internet, which formerly would have required a broker or agent. Examples include the purchase of insurance, airline tickets, books and holidays.

20 The Internet also enables new business models of buying and selling as well: for example, there are now many Internet auction sites, on which a wide range of goods and services are auctioned to the highest bidder, with the seller merely setting a reserve price or a bid start price. The terms to 'buy' and 'sell' and related expressions used in this specification should be broadly construed to include any kind of transfer of rights or interests; 'buyers' and 'sellers' should be also broadly construed to include any transferee and transferor of any kind of right or interest.

25 The terms 'party' and 'counterparty' are commonly used to describe a situation in which a given party is both a buyer and simultaneously a seller. This can arise, for example, where a party wishes to exchange US\$100 for the equivalent in Sterling. That party is simultaneously a seller of US\$ and a buyer of Sterling.

Computer systems linking many potential buyers and sellers of goods and services over an extensive computer network also existed prior to the widespread adoption of the Internet, particularly in the financial services sector. One example is the foreign exchange dealing systems developed and run by organisations such as Reuters plc and the EBS Partnership. In these systems, banks post the prices at which they are willing to buy or sell defined quantities of currencies. The systems automatically spot matches – i.e. where a potential buyer is willing to buy at a price at which a potential seller is willing to sell – and complete the trade. If a potential buyer of currency can find no-one willing to sell at a price it considers low enough, then, typically, that potential buyer will simply have to either wait for the pricing in the market to become more favorable, or else be prepared to pay more. Such systems are commonly used for currency speculation, currency arbitrage, currency hedging, and currency procurement.

In addition to the need for speculative currency trading, there exists also a very substantial need for corporations to buy and sell foreign currency, for example, to pay overseas suppliers. Similarly, individuals travelling abroad or making foreign investments need to obtain foreign currencies as well. Currently, corporations and individuals will approach a bank or foreign currency vendor (such as American Express Inc.) to obtain foreign currency. The bank or foreign currency vendor will in turn often have obtained its stocks of foreign currency from other banks, in many cases having used an inter-bank trading system such as the Reuters or EBS systems. Because of the chain of intermediaries, the transaction cost of buying or selling foreign exchange in this way is quite high: this is reflected in the difference between the bid and the offer prices: a bank will typically sell foreign currency at a rate considerably higher than the rate at which it will buy it back. For small

transactions, the difference can be 4% (400 basis points). For larger transactions, the difference is typically 5 basis points. (A basis point equals one-one hundredth of a 'cent' (percent) or, more simply, 100 basis points equals one cent). This difference between the bid and the offer is referred to as the 'spread'.

#### Statement of the Present Invention

In accordance with a first aspect of the present invention, there is provided a computer based system which enables a party and a counter-party to be efficiently matched, comprising a first computer terminal into which the party inputs details of a potential transaction to acquire assets of type A in exchange for assets of type B, a second computer terminal into which the counterparty inputs details of a potential transaction to acquire assets of type C in exchange for assets of type D, a computer network connecting the first and second terminals; characterised in there being a computer program arranged to calculate directly or indirectly a mid-point price at which type A assets can be obtained in exchange for assets of type B.

Preferably, the mid-point price is the mid-point between (a) a price for exchanging type A for type B assets established by reference to data substantially independent of the party and the counterparty and (b) a price for exchanging type B for type A assets, established by reference to data substantially independent of the party and the counterparty. In a simple bi-lateral situation, asset type C is the same as asset type B and asset type D is the same as asset type A. In more complex situations, 2 or more parties/counterparties may be involved and the asset pairs associated with each party (i.e. asset required and asset available) may not match the asset pairs from any single other counterparty. Hence, in the broadest statement of the first aspect of the invention, the asset pair of the counterparty is